REMARKS

In the Office Action, claim 14 and dependent claims 15-24 thereof, were rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 14-28 were again rejected under 35 U.S.C. 102(e) as being anticipated by Cox et al. (U.S. Patent No. 7,130,835).

In this response, claim 14 has been amended. Upon entry of the amendments, claims 14-24 will be pending, claims 1-13 having been previously withdrawn.

Reconsideration of the application in view of the amendments and the following remarks is respectfully requested.

Rejections Under 35 U.S.C. § 101

Claim 14 and dependent claims 15-24 thereof, were rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 14 has been amended to recite a further step of "controlling the device for the ablation according to the graphic visualization using the optic and geometrical data of the eye." Applicant respectfully submits that claim 14, as amended, recites a statutory machine-tied method. Withdrawal of the rejection under 35 U.S.C. §101 is respectfully requested.

Rejections Under 35 U.S.C. § 102(e)

Claims 14-28 were again rejected under 35 U.S.C. §102(e) as being anticipated by Cox et al. (U.S. Patent No. 7,130,835).

Cox describes a method that enables predictive outcomes for proposed therapeutic ophthalmic corrections including photoablative refractive surgical procedures and customized ophthalmic optics, which support a transactional model for providing the predictive outcomes. Cox describes the use of optimized theoretical and historical, outcome-determinative data to generate a

best predictive instruction for the practitioner's use to optimize the outcome of a proposed vision defect correction. According to Cox, a practitioner enters parameters thought to influence the outcome of the procedure, such as patient profile information (biographical, refraction, cultural), practitioner technique, equipment specifications, diagnostic procedure (optical coherence tomography (OCT) or ultrasound), or ambient environment conditions, into a statistical analysis program of a computer. Based upon historically analyzed data, the computer program can generate an outcome-predictive instruction. See Cox column 3, lines 23-67. Cox also describes the use of a graphical user interface (GUI) having a display and a selection device that facilitates the selection of collected information for analysis resulting in an outcome-predictive instruction for a proposed vision correction procedure. See column 5, lines 6-10.

As amended, independent claim 14 recites a method for controlling a device for an ablation of a part of a human eye that includes "controlling the device for the ablation according to the graphic visualization using the optic and geometrical data of the eye." Support for the amended claim is found, for example, at paragraphs [0001], [0006], and [0009]. Claim 14 also recites "performing a graphic simulation of the ablation in the form of a graphic visualization." As described in paragraph [0006], once the optical and geometric eye data have been established, in particular cornea thickness (pachymetry) and curvature (topography), a graphic simulation of the ablation is carried out in the form of a graphic visualization, and data for each eye can be summarized in a pachymetry map and a topography map. The pachymetry of the cornea before and after the treatment procedure is represented graphically, and these data are further used to control the ablation. Data are entered into computer software, and the physician can thus graphically anticipate the results of the ablation and in particular recognize critical or problem areas, which, with the aid of the software, are displayed as warnings.

Applicants submit that Cox does not teach the step of "performing a graphic simulation of the ablation in the form of a graphic visualization." Cox merely describes a predictive best outcome instruction based on historical data and the ophthalmic defect information about a patient. The Cox GUI merely facilitates selection of information for preparing results in an outcome-predictive

instruction. There is no teaching, however, of any graphic simulation of the proposed ablation treatment itself, so that the ablation is visualized.

Nor does Cox teach the step of "controlling the device for the ablation using the electronic data processing system according to the graphic visualization using the optic and geometrical data of the eye." Cox teaches a method that provides a predictive outcome for the correction comprising a predictive best instruction derived from a historical analysis of collected patient data. Cox fails to teach the step of *controlling* the device based upon the data of the eye. The predictive best method instruction provided to the physician as described by Cox does not constitute "controlling the device" as defined in claim 14.

Independent claim 25 recites a device for treating a human eye using laser irradiation that includes a pachymetry apparatus, "an overlapping apparatus configured to provide a point-accurate, centred overlaying of the aberrometry, topography, and pachymetry," and "an electronic data-processing apparatus configured to link the aberrometry, topography, pachymetry and further patient data to ablation values using a processing model."

Applicants respectfully submit that Cox is not wholly entitled to the prior art date, since provisional patent application 60/368,643 does not properly support the disclosure of "pachymetry," which was later added to the Cox non-provisional patent application.

Nor does the disclosure of "one or more diagnostic devices" including an optical tomography (OCT) system and an ultrasound device," (see Office Action p. 3), suffice to support the later disclosure in the Cox non-provisional of eye pachymetry since there is no suggestion those devices are used to measure pachymetry. OCT and ultrasound are known to be used for a number of diagnostic techniques, such as determining retinal nerve fiber thickness or general status of the retina. Therefore, the broad disclosure of OCT and ultrasound in Cox in no way suggests a pachymetry apparatus. Furthermore, the later inclusion of pachymetry shows that Cox did not intend the disclosure of OCT or ultrasound to refer to pachymetry devices.

Furthermore, the Cox provisional application does not disclose an overlaying apparatus configured to provide an "overlaying of the aberrometry, topography, and pachymetry" and does not disclose an electronic data-processing apparatus configured to "link the aberrometry, topography, and pachymetry" to ablation values as recited in claim 25.

Moreover, pachymetry, as explained in the specification, is important to prevent "too small a residual thickness of the cornea." See Specification, paragraph [0006]. The Cox provisional does not even recognize or suggest the need for such a safety precaution in order to have successful post-operation results.

Withdrawal of the rejections to claims 14-28 under 35 U.S.C. § 102(e) is respectfully requested.

CONCLUSION

In view of the above amendment, applicant believes the pending application is in condition for allowance.

The Commissioner is hereby authorized to charge any unpaid fees deemed required in connection with this submission, including any additional filing or application processing fees required under 37 C.F.R. §1.16 or 1.17, or to credit any overpayment, to Deposit Account No. 04-0100.

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Respectfully submitted,

By _____

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